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(ii) a derivative of said *Helicobacter* polypeptide.

9. The compound of claim 8, which is the mature form or a derivative of a polypeptide encoded by a DNA molecule of claim 4.

10. The compound of claim 8, which is the mature form or a derivative of a polypeptide encoded by a DNA molecule of claim 5.

11. A method of preventing or treating *Helicobacter* infection in a mammal, said method comprising administering to said mammal a prophylactically or therapeutically effective amount of a compound of claim 8.

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1 21. The method of claim 11, further comprising administering to said mammal a
2 prophylactically or therapeutically effective amount of a second *Helicobacter* polypeptide
3 or a derivative thereof.

1 22. The method of claim 21, wherein the second *Helicobacter* polypeptide is a
2 *Helicobacter* urease, or a subunit or a derivative thereof.

1 23. A composition comprising a compound of claim 8, together with a
2 physiologically acceptable diluent or carrier.

1 24. The composition of claim 23, further comprising an adjuvant.

1 25. The composition of claim 23, further comprising a second *Helicobacter*
2 polypeptide or a derivative thereof.

1 26. The composition of claim 25, wherein said second *Helicobacter* polypeptide
2 is a *Helicobacter* urease, or a subunit or a derivative thereof.

1 27. A method of preventing or treating *Helicobacter* infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of a polynucleotide of claim 1.

1 28. A method of preventing or treating *Helicobacter* infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of a polynucleotide of claim 4.

1 29. A method of preventing or treating *Helicobacter* infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of a polynucleotide of claim 7.

1 30. A composition comprising a viral vector, in the genome of which is inserted a
2 DNA molecule of claim 3, said DNA molecule being placed under conditions for
3 expression in a mammalian cell and said viral vector being admixed with a
4 physiologically acceptable diluent or carrier.

1 31. The composition of claim 30, wherein said viral vector is a poxvirus.

1 32. A composition that comprises a bacterial vector comprising a DNA molecule
2 of claim 3, said DNA molecule being placed under conditions for expression and said
3 bacterial vector being admixed with a physiologically acceptable diluent or carrier.

1 33. The composition of claim 32, wherein said vector is selected from the group
2 consisting of *Shigella*, *Salmonella*, *Vibrio cholerae*, *Lactobacillus*, *Bacille bilié de*
3 Calmette-Guérin, and *Streptococcus*.

1 34. A composition comprising a polynucleotide of claim 1, together with a
2 physiologically acceptable diluent or carrier.

1 35. The composition of claim 34, wherein said polynucleotide is a DNA molecule
2 that is inserted in a plasmid that is unable to replicate and to substantially integrate in a
3 mammalian genome and is placed under conditions for expression in a mammalian cell.

1 36. An expression cassette comprising a DNA molecule of claim 3, said DNA
2 molecule being placed under conditions for expression in a procaryotic or eucaryotic cell.

1 37. A process for producing a compound of claim 8, which comprises culturing a
2 procaryotic or eucaryotic cell transformed or transfected with an expression cassette of
3 claim 36, and recovering said compound from the cell culture.

1 38. A method of preventing or treating Helicobacter infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of an antibody that binds to the compound of claim 8.